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# POLICY BRIEF

## URBAN TRANSPORT & SDG 1: NO POVERTY

This document is a part of series of six policy briefs that identify interactions of the urban transport with six UN Sustainable Development Goals (SDGs); SDG1: No Poverty, SDG3: Good Health & Well-being, SDG5: Gender Equity, SDG8: Economic Growth, SDG11: Sustainable Cities & Communities, and SDG13: Climate Action.

**SUSTAINABLE  
DEVELOPMENT GOALS**

# About

This policy brief is part of the OPTIMISM (Opportunities for Climate Mitigation and Sustainable Development) project. OPTIMISM is an international multi-stakeholder partnership and research network funded by the UK Natural Environment Research Council as part of the research council's "Towards a Sustainable Earth" program. The international team consists of four partners: (i) Imperial College London, UK, (ii) Lund University, Sweden, (iii) Waseda University, Japan; and (iv) Ahmedabad University, India. Dr. Darshini Mahadevia (Principal Investigator-India) and Dr. Minal Pathak (Co-Principal Investigator) lead the project team placed in India that is supported and funded by the Department of Biotechnology (DBT), Government of India. The project team in India consisted of Dr. Chandrima Mukhopadhyay, Saumya Lathia, Amitkumar Dubey, Kanika Gounder, Bandish Patel, and Saleem Yattoo.

Adopting a whole-systems perspective, the OPTIMISM project uses the United Nations Sustainable Development Goals framework to analyze (i) the change in human development and the environment amidst rapid and extensive climate action and (ii) the role of insights from sectoral-SDG interaction in creating policies and practices that enable a transformational change. This document is a part of series of six policy briefs that identify interactions of the urban transport with six UN Sustainable Development Goals (SDGs); SDG1 - No Poverty, SDG3- Good Health & Well-being, SDG5 - Gender Equity, SDG8 - Economic Growth, SDG11- Sustainable Cities & Communities, and SDG13 - Climate Action. The document stems from a literature review of over 250 publications.

**Authors:** Darshini Mahadevia, Saumya Lathia, Shaurya Patel, Kanika Gounder, Minal Pathak, Chandrima Mukhopadhyay

**Contributors:** Bhavya Patodi, Isha Iyer and Kanika Bajaj.

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# SDG 1: No Poverty

## What's the Goal & Why Does It Matter?

### The Goal: End poverty in all its form everywhere.

Across 111 countries, 1.2 billion people – 19.1 percent – live in acute multidimensional poverty (referred to as “poverty” throughout), and half of these people (593 million) are children under age 18 [i]. The developing region – Sub-Saharan Africa (579 million) and South Asia (385 Million) has the highest number of poor people [i][ii]. The COVID-19 pandemic wiped out more than twenty years of progress on poverty eradication and pushed 93 million more people into extreme poverty in 2020 [ii]. With the rise in working poverty, additional 8 million workers were pushed into poverty [iii]. Growing inequality is detrimental to economic growth and undermines social cohesion, increasing political and social tensions and, in some circumstances, driving instability and conflicts [iii]. Countries in the Global South (housing majority of the population living in extreme poverty) need unprecedented levels of pro-poor growth strategies to achieve this goal. In India, for example, 415 million people exited poverty between 2005/06 – 2019/21, demonstrating that the Sustainable Development Goal (SDG) target 1.2 (refer to the appendix for SDG 1 Target description) is possible to achieve – and at scale [i].

## What is its relationship with Transportation?

Transport networks reduce poverty by providing access to economic opportunities and, in turn, increase travel demand, creating a two-way relationship between transport and poverty alleviation [iv]. Owing to its potential to reduce incidences of extreme poverty among peripheral and remote households, access to affordable, low-carbon transport like public transport (PT) is considered a basic service (SDG targets 1.1, SDG1.2). Public transport interventions like Bus Rapid Transit (BRT) have been reported as effective poverty

reduction strategies in the Global South [v][vi][vii].

The lack of a holistic planning approach in the cities of the Global South creates fragmented and inconvenient transport systems that often exclude the urban poor and other disadvantaged groups, curbing their access to opportunities and exacerbating their poverty [viii][v]. This phenomenon- where poorer communities and other disadvantaged populations lack reliable transport networks and mode choices, resulting in disrupted mobility, is known as a spatial mismatch [viii][ix][x]. Women and youth from poorer communities are disproportionately affected by spatial mismatch due to their high dependence on public transit [vii] [ix].

Inaccessible and inconvenient public transport networks in cities of the Global South force the urban poor to commute via non-motorized transport modes like walking and cycling, making them captive users [x][xi][xii]. The lack of favorable public transport systems deepens their poverty in multiple ways; relying on non-motorized transport limits their access to opportunities [xi]; being forced to rely on other motorized shared-transport modes like intermediate public transport (auto-rickshaws) results in a higher household transport expenditure [xiii]; the absence of safe and adequate non-motorized transport infrastructure makes them more prone to road accidents and related healthcare expenditures [xiv]. Since most low-income households don't have access to healthcare insurance and social security funds[xv][xvi], they often have to rely on out-of-pocket health expenditures and resort to distress financing (borrowing money from relatives/ friends, taking loans from banks/ other lenders, or selling assets)-exacerbating their poverty [x] [xvii] (SDG targets 1.1, 1.2 and 1.4).

Although transport infrastructure improvement projects are linked with decreased incidences of poverty- especially in the context of regional transport [xi][xv][xviii] projects that require land acquisition (ex., road widening, underpasses & over-bridge

construction, BRT & Metrorail construction, etc.) often disproportionately benefit wealthier residents while leaving poorer residents burdened by the negative externalities [xv] [xvi]. These negative externalities include poor air quality, evictions and loss of resources, displacements to peripheral locations with limited and unaffordable transport options, dangerous walking infrastructure, and exclusion from opportunities, deepening their economic insecurity (1.5). For example, in east India, poor households are also disproportionately affected by unfair land acquisition and compensation for the construction of national and state highways [iv][xviii] (SDG target 1.A).

Transport plays a critical role in achieving climate resilience – especially in the case of pre- and post-disaster management, as poor people are most affected due to climate change and extreme weather events (SDG target 1.5). Since the urban poor often reside on undevelopable or ecologically-sensitive land parcels, transport systems in their vicinity (like access roads) are more prone to the adverse impacts of disasters, compromising their reach to disaster relief [xvii].

Urban poor are more likely to be located in peripheral locations or in close proximity of road infrastructure. Bypassing traffic causes acidification and emits black carbon, PM 2.5, SO<sub>2</sub>, and NO<sub>x</sub>, which have harmful ecological effects on the soil & water quality and agricultural produce [xviii][xix]. This significantly affects the farmers and agriculture-related workers in adjoining semi-urban and rural areas. As a result of being located along an arterial road (with high traffic volume), they face economic losses due to poor quality or quantity of produce, further deepening their poverty (SDG targets 1.1, 1.5).

## How can transport help reduce poverty?

Access to affordable and reliable low-carbon transport modes like public transport and quality infrastructure for non-motorized transport reduces absolute poverty by enhancing economic opportunities and leads to

improved health outcomes in the communities [iv] [viii] [xix] [xx]

## What can states do?

Although cities anchor the implementation of pro-poor transport planning and design, the state has a vital role to play:

- Incorporating pro-poor transport planning in national and sub-national visions for the transport sector.
- Enabling inter-sector partnerships to achieve SDG 1 - No Poverty.
- Promote and incentivize urban local bodies to create pro-poor transport systems.
- Creating financing mechanisms that enable local bodies to upgrade public transport networks.
- Promote and aid investments in non-motorized infrastructure provision and maintenance.
- Create a monitoring and evaluation framework to measure the impact of transport on poverty reduction.
- Expand existing financial inclusion program to include subsidies for public transport at the city level. For example, India's 'Pradhan Mantri Jan Dhan Yojana' could incorporate added social protection if expanded to include direct benefit transfers to the urban poor while using public transport

## What can cities do?

Pro-poor transport planning at the city level can effectively mitigate negative externalities endured by the urban poor and other disadvantaged groups:

- Prioritizing the needs of low-income communities in transport planning and investment decisions.
- To mitigate the situation of falling deeper into poverty, nearby alternative locations should be allotted to the displaced for economic activity and housing or adequate resettlement.
- Connecting the location of rehabilitation sites, construction sites, informal settlements, or/and affordable housing to the city's commercial & economic generating areas educational & health

facilities through affordable public transport projects is crucial for ensuring their economic sustenance.

- Upgrading and extending public transport networks as integrated and multi-modal systems.
- Fair integration across modes with considerable subsidies for the urban poor and other disadvantaged groups.
- Upgrading and extending non-motorized transport infrastructure, with a focus on the safety and comfort of the users.
- Incorporating gender-sensitive planning and design to create safe and convenient transport infrastructure for women (for more details, refer to the policy brief on SDG 5).
- Access to intra-city mobility through affordable and accessible public transport to be included as a floor of social protection (SDG target 1.3)[xxi][xxii], which includes access to a public transport network with 500 m distance and pricing it as <10% of the daily income of low-income households is vital.
- Encouraging carpooling, car-sharing, and other forms of ride-sharing to reduce the number of cars on the road and improve mobility for low-income residents.
- Involving low-income communities in the transportation planning process to ensure their needs and perspectives are considered.

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## Appendix

### SDG 1 Targets

1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day.

1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable

1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance

1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters

1.A Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions

1.B Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions

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**Ahmedabad  
University**

## **Contact Us**

School of Arts & Sciences, Ahmedabad University, Commerce Six Roads,  
Navrangpura, Ahmedabad - 380009, Gujarat, India; Email:  
artsandsciences@ahduni.edu.in; Phone: +91.79.61911502

OR

Global Centre for Environment and Energy, Ahmedabad University, GICT  
Building, Central Campus, Navrangpura, Ahmedabad 380009, Gujarat  
380009 Email: gcee@ahduni.edu.in; Phone+91.79.61911000